lia: pedes flavi; coxæ virides; trochanteres picei; femora viridia, apice flava; tarsi apice fusci: alæ limpidæ; squamulæ piceæ; nervi fulvi; nervus ulnaris humerali multo longior, radialis nullus, cubitalis sat longus; stigma minimum. (Corp. long. lin. \frac{3}{4}; alar. lin. \frac{1}{3}.)

## XX.—Short notice of a Botanical Trip to the Highlands of Scotland. By Professor J. H. Balfour, M.D.

This trip was made in August last, along with my friend Mr. Babington and several of my pupils. We first visited the Clova district, and collected most of the rare alpine plants which are known to exist in that part of the Grampian range. Sonchus alpinus was found in a new locality in Glen Dole. The cliff on which Astragalus alpinus used to be found abundantly was examined with care, but only two or three specimens of the plant were seen.

From Clova we proceeded by Glen Callatea to Braemar, and made several botanical excursions in the neighbourhood

of Castleton.

In our ascent of Ben Aven, one of the lofty mountains in the Braemar district, we examined a hill called Little Craigindal, which deserves notice on account of the number of good alpine plants which it furnished. The hill has a rounded contour, is readily accessible, and is composed of loose dry granitic and micaceous rocks. We were delighted to find upon it Astragalus alpinus in great abundance, both in flower and fruit. In some places the turf was actually composed of this plant. Carex rupestris was also growing beside it in large The other plants seen on this hill were, Thalictrum alpinum, Viola palustris, Silene acaulis, Dryas octopetala, Potentilla alpestris, Rubus chamæmorus, Alchemilla vulgaris, β. subscricea, Epilobium alpinum and alsinefolium, Sedum Rhodiola, Saxifraga oppositifolia, aizoides and stellaris, Cornus suecica, Hieracium alpinum and murorum, \( \beta \). pulmonarium, y. Lawsoni, Saussurea alpina, Gnaphalium supinum, Vaccinium uliginosum, Arctostaphylos Uva-ursi, Azalea procumbens, Pyrola media and secunda, Veronica Chamædrys, var. hirsuta, and V. serpyllifolia, B. humifusa, Trientalis europæa, Armeria maritima, B. alpina, Oxyria reniformis, Salix herbacea and myrsinites, \( \beta \). arbutifolia, Betula nana, Listera cordata, Tofieldia palustris, Juncus trifidus and triglumis, Luzula spicata, Carex rigida, capillaris and pauciflora, Aira alpina, Lycopodium alpinum. The hill at first sight appeared to be very unpromising in a botanical point of view, not presenting any of those wet, disintegrating, micaceous cliffs, on which the best alpine plants in Scotland are found; and I have therefore detailed fully all the plants which were observed, with the view of calling the attention of botanists to many hills of a similar nature which occur in the Braemar district, and which I fear have been overlooked. Much still remains to be done in that part of Scotland, and I have no doubt that many of the plants hitherto considered as confined to the Clova range will, on careful examination, be detected on the Braemar hills. On reaching the summit of Ben Aven we gathered Luzula arcuata in considerable quantity.

In all the alpine districts which we visited, we met with numerous varieties of *Hieracium alpinum*, *Halleri* and *Lawsoni*. These require to be carefully studied, and I trust that ere long Mr. Babington will give us the result of his exami-

nation.

On leaving Braemar Mr. Babington and I proceeded to Dingwall, with the view of botanizing on some of the Rossshire mountains. On Ben Wyvis we saw luxuriant specimens of Arctostaphylos alpina, growing in a damp situation more than 1000 feet below the summit. In the other districts of Scotland in which I have picked this plant, I have generally found it on the dry stony summits of the mountains. The other plants found on Ben Wyvis are not of such importance as to deserve notice. The mountain is not rich in alpine species, a character which it appears to possess in common with most of the other hills in Ross-shire.

We returned to Glasgow by the Caledonian Canal and Inverary, and picked *Potamogeton plantagineus* in several localities near Oban, and a variety of *Hieracium prenanthoides*, without a ray on the shores of Loch Long near Arrochar.

## XXI.—Excerpta Zoologica: On Metamorphoses among Intestinal Worms. Communicated by W. Francis, Ph. D., A.L.S.\*

M. Miescher found Filaria piscium especially frequent in the following fish exposed for sale in the Paris market: in Triglæ Gurnardus, Lyra, Cuculus, and lineata, in Trachinus Draco and Gadus Merlangus. The Filariæ were partly free in the ventral cavity; some lie beneath the peritoneal coverings of the different intestines, between the layers of the mesentery beneath the peritoneum of the ventral walls,

<sup>\*</sup> The present notice, which was alluded to in the last Number of this Journal, p. 48, is taken from Dr. Th. von Siebold's valuable report on the investigations in Helminthology during 1840, and published in Wiegmann's 'Archiv,' parts 4 and 5 for 1841. It not only furnishes the results of Miescher's interesting discoveries, but also draws attention to similar investigations by Leblond and Dr. Siebold. Miescher's paper is published in the Reports of the Proceedings of the Naturalists' Society in Bâle.